

NBC - FIELDS POINT WWTF

The largest and oldest wastewater treatment facility in Rhode Island (and the 3rd oldest in the United States), Fields Point has been treating the metropolitan Providence wastewater since April of 1901. Providence extensively upgraded the facility in the 1930s and the 1950s. Fields Point later became a statewide embarrassment when in the late 1970s the city allowed the plant to fall into total disrepair. This resulted in the ongoing discharge of raw sewage, and subsequent court challenges, which resulted in the creation of the Narragansett Bay Commission, a quasi-state corporation which manages, operates and maintains the plant and its collections system. Today, Fields Point is an example of a well-run wastewater treatment facility. In 1995 NBC won first place in EPA's National Excellence Award Program. Staffed by 73 operators and mechanics, Fields Point is located off Ernest Street and discharges into the Providence River.



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Overall Treatment: Good

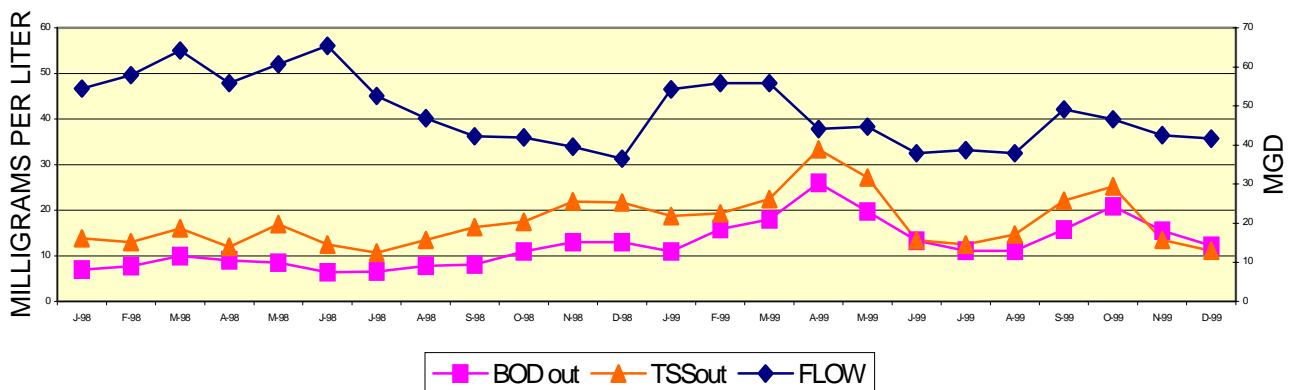
Having no monthly violations for flow, BOD, or fecal coliform but one for TSS in April 1999, and with 12 daily maximum violations for BOD and TSS, Fields Point received a rating of Good.

CURRENT AND FUTURE CONCERNS

NBC's Fields Point's permit formally expired on September 30, 1997 and will be reissued upon completion of a study underway of the Providence River.

The new permit will most likely include limits for ammonia and total nitrogen. The facility achieved compliance with the final limits for total residual chlorine on effective September 1, 1999. Overall, there are no significant concerns regarding permit compliance. The Combined Sewer Overflow (CSO) sections of a Consent Agreement between NBC and RIDEM (RIA-029) was modified to include schedules for design and construction of the CSO abatement plan, identified in the April 17, 1998 Concept Design Report Amendment (which was approved by RIDEM July, 1999).

NBC—FIELDS POINT EFFLUENT DATA - 1998/1999



BEGAN OPERATION 1901

ANNUAL SURVEY

PARAMETER	1996	1997	1998	1999	PERMIT LIMIT	VIOLATIONS 1998/1999
FLOW (MGD)	49.5	44.4	51.5	45.7	65	0/0
BOD INFLUENT (MG/L)	104.9	126.0	118.0	128.3		
BOD EFFLUENT (MG/L)	8.2	6.2	9.0	15.9	30	0/0
BOD INFLUENT (LBS./DAY)	42590.3	45480.1	49765.0	48338.0		
BOD EFFLUENT (LBS./DAY)	3445.9	2324.6	3766.0	6106.6		
BOD % REMOVAL	91.9	94.9	92.4	87.4		
TSS INFLUENT (MG/L)	89.0	125.7	110.8	106.1		
TSS EFFLUENT (MG/L)	16.2	14.3	15.5	19.5	30	0/1
TSS INFLUENT (LBS./DAY)	35982.0	45455.8	47183.0	39964.0		
TSS EFFLUENT (LBS./DAY)	6768.9	5234.2	6480.0	7558.6		
TSS % REMOVAL	80.9	88.3	86.3	81.1		
FECAL COLIFORM (MPN/100ML)	61.2	56.3	81.0	53.5	200.0	0/0
CHLORINE RESIDUAL (MG/L)	1.5	1.5	1.3	1.3	2.0*	0/2

Operations & Maintenance

The Fields Point facility is one of the most complex facilities in the state, resulting in substantial operations and maintenance demands. Over the 2-year period of 1998 and 1999, Fields Point upgraded lab-sampling operations to achieve better quality control. Staff also upgraded its grit removal system and put online its new dechlorination system. The facility also installed a new computer control system.

1998 O&M Rating: 10 out of 10
 1999 O&M Rating: 10 out of 10
 1998 Laboratory Rating: 5 out of 5
 1999 Laboratory Rating: 5 out of 5
Overall O&M Rating: Excellent

1998 SLUDGE DISPOSAL METHOD

Incineration/Central Landfill

SLUDGE PRODUCED

6459/539 DRY TONS

1999 SLUDGE DISPOSAL METHOD

Incineration/Central Landfill

SLUDGE PRODUCED

6386/647 DRY TONS

NBC operates an incinerator at the facility by which 90% of the sludge generated at the facility was disposed. The remaining 10% was buried at the Central Landfill.

*Daily Maximum Limit: 0.064 mg/l as of 9/1/99

NBC - FIELDS POINT 1986 -1999 DATA

